Technical Data Sheet

PE-CF594 Rat Anti-Human IL-10

Product Information

Material Number:	562400
Alternate Name:	Interleukin-10; CSIF; Cytokine synthesis inhibitory factor; TGIF
Size:	50 tests
Vol. per Test:	5 μl
Clone:	JES3-19F1
Immunogen:	Recombinant Human IL-10
Isotype:	Rat IgG2a
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The JES3-19F1 antibody reacts with human interleukin-10 (IL-10). The immunogen used to generate the JES3-19F1 hybridoma was recombinant human IL-10 expressed in COS cells. This is a neutralizing antibody. This antibody also reacts with viral IL-10.

This antibody is conjugated to BD HorizonTM PE-CF594, which has been developed exclusively by BD Biosciences as a better alternative to PE-Texas Red®. PE-CF594 excites and emits at similar wavelengths to PE-Texas Red® yet exhibits improved brightness and spectral characteristics. Due to PE having maximal absorption peaks at 496 nm and 564 nm, PE-CF594 can be excited by the blue (488-nm), green (532-nm) and yellow-green (561-nm) lasers and can be detected with the same filter set as PE-Texas Red® (eg 610/20-nm filter).



Multicolor flow cytometric analysis of IL-10 expression by stimulated CD14+ human monocytes. Human peripheral blood mononuclear cells (PBMC) were stimulated for 24 hours with lipopolysaccharide (LPS; Sigma-Aldrich Cat. No. L3137; 1 µg LPS/ml final concentration) in the presence of BD GolgiStop™ (2 µM final concentration; Cat. No. 554724). The PBMC were harvested and stained with FITC Mouse Anti-Human CD14 antibody (Cat. No. 557153) and then fixed and permeabilized using the BD Cytofix/Cytoperm™ Fixation/Permeabilization Solution Kit (Cat. No. 554714). The permeabilized cells were subsequently stained with BD Horizon™ PE-CF594 Rat Anti-Human IL-10 antibody (Cat. No. 562400) following the BD Biosciences staining protocol (Left Panel). The binding of BD Horizon™ PE-CF594 Rat Anti-Human IL-10 antibody was blocked by preincubation of the fixed and permeabilized cells with Purified Rat Anti-Human IL-10 antibody (Cat. No. 554705; Right Panel). Two-color flow cytometric dot plots showing the expression of CD14 versus IL-10 were derived from gated events with the forward and side light-scatter characteristics of intact monocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.

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Application Notes

Application

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Suggested Companion Products

Catalog Number	Name	Size	Clone	
562302	PE-CF594 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95	
554724	Protein Transport Inhibitor (Containing Monensin)	0.7 ml	(none)	
554714	BD Cytofix/Cytoperm [™] Fixation/Permeablization Kit	250 tests	(none)	
557153	FITC Mouse Anti-Human CD14	50 tests	M5E2	

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^{6} cells in a 100-µl experimental sample (a test).
- An isotype control should be used at the same concentration as the antibody of interest. 2.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States. 3
- Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem 4. fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before 5. discarding to avoid accumulation of potentially explosive deposits in plumbing.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at 6. www.bdbiosciences.com/colors.
- 7 Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- CF[™] is a trademark of Biotium, Inc. 8.
- 9. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
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- Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using multi-laser cytometers, which 11. may directly excite both PE and CF™594.
- 12. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Schlaak JF, Schmitt E, Hüls C, Meyer zum Büschenfelde KH, Fleischer B. A sensitive and specific bioassay for the detection of human interleukin-10. J Immunol Methods, 1994; 168(1):49-54, (Biology)

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